REMARKS

In the Office Action, the Examiner noted that Claims 1-24 are pending in the application. However, Applicants note that Claims 1-20 and 25-28 should be pending in the application. Claims 1-24 were originally filed. Claims 21-24 were cancelled, and Claims 25-28 were newly added, in the response to the First Office Action filed on August 16, 2005. No claims were cancelled or newly added in response to the Final Office Action dated December 29, 2005. Accordingly, Claims 1-20 and 25-28 are pending.

By this response, Claims 1, 10, and 25 are amended. In view of the above amendments and the following discussion, Applicants submit that none of the claims now pending in the application are anticipated under the provisions of 35 U.S.C. §102. Thus, Applicants believe that all of these claims are now in condition for allowance.

I. Rejection of Claims Under 35 U.S.C. §102

The Examiner rejected Claims 1-24 as being anticipated by Richardson (United States patent 6,606,735, issued August 12, 2003). As noted above, Claims 21-24 were cancelled in a previous response to an Office Action. The rejection of Claims 1-20 is respectfully traversed.

More specifically, the Examiner stated that Richardson discloses obtaining a rule document and generating a table file from the rule document. The Examiner further stated that Richardson teaches obtaining a parameterized rule file having logical operations associated with design rule names and replacing the design rule names in the parameterized design rule file with respective design rule values in the table file corresponding to the design rule names. (Office Action, pp. 2-3). The Examiner concluded that Richardson anticipates Applicants' invention recited in Claims 1 and 10. Applicants respectfully disagree.

Richardson discloses expressing DRC rules in a high-level programming language, referred to as meta language. The meta language is independent of a language of a specific verification tool (native language). (Richardson, col. 4, lines 10-25). DRC rules in the meta language may be categorized into several types respectively associated with templates (DRC templates). The DRC templates map each DRC rule in the meta language onto one or more rules in the native language.

(Richardson, col. 4, lines 26-40). A user specifies a DRC rule in the meta language by noting the name of the template, the layer(s) of the integrated circuit design on which the DRC check is to be applied, and values to be used in applying the DRC rule. A runset generator searches a template library for the named template and, if the template is found, generates an instruction in the native language. (Richardson, col. 5, lines 37-50).

Richardson, however, does not teach each and every element of Applicants' invention recited in Claim 1. Namely, Richardson does not teach or suggest replacing design rule names in the parameterized rule file with corresponding design rule values in a table file. Rather, Richardson discloses mapping a rule expressed in one language (the meta language) to a rule expressed in another language (a native language of a tool). Mapping a rule to a rule, as disclosed by Richardson, does not teach or suggest replacing design rule names in a parameterized rule file with design rule values in a table file corresponding to the design rule names, as claimed by Applicants.

The differences between Richardson and Applicants' invention in Claim 1 may be understood with reference to the following illustrative example: In Applicants claim 1, a rule document is obtained that includes design rules and corresponding design rule values (step 1, Claim 1). For example, a design rule named "GR100" may have a value of "1.0" in a given rule document. (See, e.g., FIG. 4 and Applicants' specification, ¶0027). A table file is then generated that associates design rule names with corresponding design rule values (step 2, Claim 1). For example, a design rule named "rule_100" may have a corresponding value "1.0" in a given table. (See, e.g., FIG. 6 and Applicants' specification ¶¶0028, 0039). A parameterized rule file is then obtained were design rule names are used in various logical operations (step 3, Claim 1). For example, a logical operation "m1 width < rule_100" may be included in a given parameterized rule file. (See, e.g., FIG. 8B and Applicants' specification ¶0030). The design rule names in the parameterized rule file are then replaced with corresponding design rule values in the table (step 4, Claim 1). For example, the name "rule_100" in the logical expression "m1 width < rule_100" is replaced with the corresponding value "1.0" such that the logical expression becomes "m1 width < 1.0". (See, e.g., FIG. 9B and Applicants' specification ¶0031).

In Richardson, the design rule values are specified by the user for design rules in the meta language. Richardson discloses an example where a verification tool's native language uses the following keywords to denote metal spacing and width on various layers: m1space, m1width, m2space, m2width, m3space, m3width, etc. In the meta language, all of these keywords are encompassed by two keywords: L1space and L1width, and the layer number is passed as a parameter (e.g., L1space with a layer 1 parameter equates to m1space in the native language). See Richardson, col. 4, lines 41-62. Note that the actual value for the design rules do not change when the meta language is translated to the native language. Richardson specifically states that the "runset generator 121 receives a DRC rule that has been specified by the user in the meta language. Information provided by the user to specify the DRC rule includes: a name of the template, the layer(s) on which the DRC check is to be applied, and values to be used in applying the DRC rule." (Richardson, col. 5, lines 36-41).

Thus, in the example related to Applicants' claim 1, the logical operation "m1 width < rule_100" in the parameterized rule file is processed to yield "m1 width < 1.0" based on the value for rule_100 in the table. In Richardson, a user might write an operation L1space with a layer 1 parameter < 1.0 in the meta language. The statement is then translated to the operation m1space < 1.0 in the native language. In Richardson, the design rule value (e.g., 1.0) did not change from the meta language representation to the native language representation. A design rule is not the same as a design rule value. When the meta language representation is processed in Richardson, the design rules are not mapped to design rule values, but are rather mapped to design rules of a different language. The corresponding design rule values are merely replicated from the meta language representation to the other language. In Applicants' Claim 1, the parameterized rule file includes design rule names, which are then replaced with design rule values obtained from a table file for the design rule names. Mapping a rule to a rule, as disclosed by Richardson, does not teach or suggest replacing design rule names in a parameterized rule file with design rule values in a table file corresponding to the design rule names, as claimed by Applicants.

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim."

Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 221 USPQ 481, 485 (Fed. Cir. 1984). Since Richardson does not teach replacing design rule names in the parameterized rule file with corresponding design rule values in a table file, Richardson does not teach each and every element of Applicants' Claim 1 as arranged therein. Accordingly, Richardson does not anticipate Applicant's invention recited in Claim 1.

Claim 10 includes features similar to those of Claim 1 emphasized above. For the same reasons set forth above, Applicants contend that Richardson does not anticipate the invention of Claim 10. Finally, Claims 2-9 and 11-20 depend, either directly or indirectly, from Claims 1 and 10 and recite additional features therefor. Since Richardson does not anticipate Applicants' invention as recited in Claims 1 and 10, dependent Claims 2-9 and 11-20 are also not anticipated and are allowable. Therefore, the Applicant contends that Claims 1-20 are not anticipated by Richardson and, as such, fully satisfy the requirements of 35 U.S.C. §102.

II. Unconsidered Claims

In the Office Action, the Examiner did not consider Claims 25-28. Applicants contend that Claims 25-28 are in condition for allowance least for the reasons set forth above.

CONCLUSION

Thus, Applicants submit that none of the claims presently in the application are anticipated under the provisions of 35 U.S.C. §102. Consequently, Applicants believe that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring any adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Kim Kanzaki at (408) 879-6149 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

All claims should be now be in condition for allowance and a Notice of Allowance is respectfully requested.

Respectfully submitted,

Kim Kanzaki, Ph.D.
Attorney for Applicants
Reg. No. 37,652

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on May 10, 2006.

Pat Tompkins
Name

Pat Tompkins
Signature